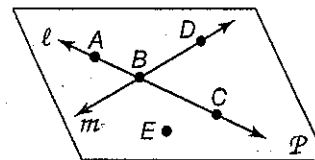


1-1 Points, Lines, and Planes
Worksheet

Exercises

Refer to the figure.



1. Name a line that contains point A.
2. What is another name for line m ?
3. Name a point not on \overleftrightarrow{AC} .
4. What is another name for line l ?
5. Name a point not on line l or line m .

Draw and label a figure for each relationship.

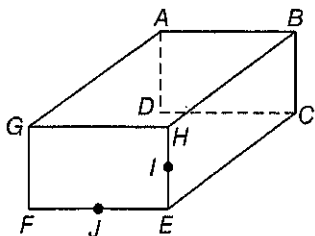
6. \overleftrightarrow{AB} is in plane Q .
7. \overleftrightarrow{ST} intersects \overleftrightarrow{AB} at P .
8. Point X is collinear with points A and P .
9. Point Y is not collinear with points T and P .
10. Line l contains points X and Y .

Drawings for numbers 6-10

6. 7. 8.

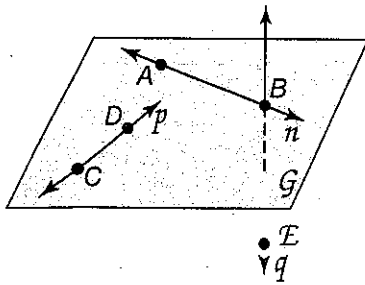
9. 10.

Refer to the figure to answer the following questions.



11. Name three line segments that intersect at point A.
12. Name the line of intersections of planes GAB and FEH.
13. Do planes GFE and HBC intersect? If so, what is their intersection?

Refer to the figure below for questions 14-17.



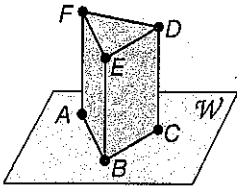
14. Name a line that contains point E.

15. Name a point contained in line n .

16. What is another name for line p .

17. Name the plane containing lines n and p .

Refer to the figure below for questions 18-21.



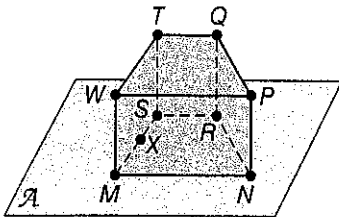
18. How many planes are shown in the figure?

19. How many of the planes contain points F and E?

20. Name four points that are coplanar.

21. Are points A, B, and C coplanar?

Refer to the figure below for questions 22 - 24.



22. How many planes are shown in the figure?

23. Name three collinear points.

24. Are points N, R, S, and W coplanar? Explain.

VISUALIZATION Name the geometric term modeled by each object. (point, line, or plane)

25. Blanket

26. Telephone Pole

27. Tip of pen

28. The edge of a desk

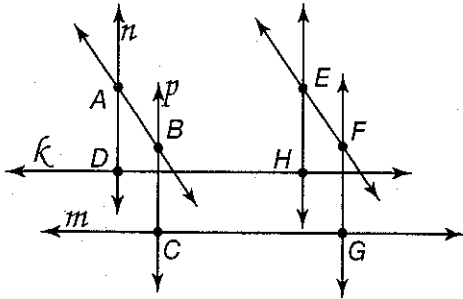
29. A partially opened folder

30. A knot in a rope

WORD PROBLEM PRACTICE

31.

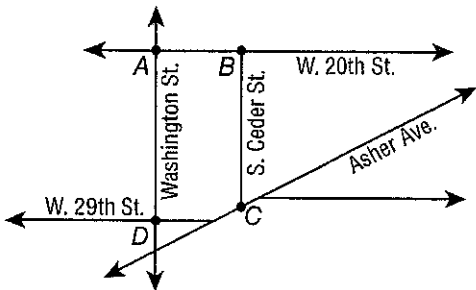
CONSTRUCTION Mr. Riley gave his students some rods to represent lines and some clay to show points of intersection. Below is the figure Lynn constructed with all of the points of intersection and some of the lines labeled.



- a. What is the intersection of lines k and n ?
- b. Name the lines that intersect at point C .

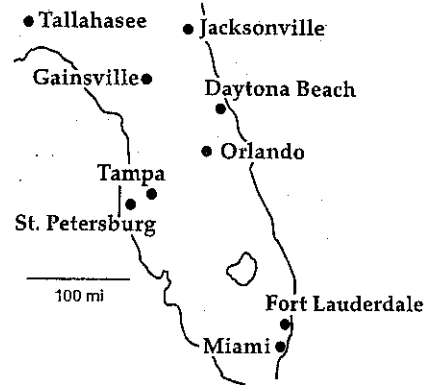
33.

STREETS The map shows some of the roads in downtown Little Rock. Lines are used to represent streets and points are used to represent intersections. Four of the street intersections are labeled. What street corresponds to line AB ?



32.

FLYING Marsha plans to fly herself from Gainesville to Miami. She wants to model her flight path using a straight line connecting the two cities on the map. Sketch her flight path on the map shown below.



34.

MAPS Nathan's mother wants him to go to the post office and the supermarket. She tells him that the post office, the supermarket and their home are collinear, and the post office is between the supermarket and their home. Make a map showing the three locations based on this information.